> R. Shelford (Oxford).

> On a collection of Blattidae (Orthoptera) made in Central Peru by M. Nicolas lkonnikov.

(Witlı 5 fig.).

R. Shelford (Oxford).<br>О коллекціи таракановыхъ, собранной Н. Иконниковымъ Въ центральномъ Перу (Orthoptera, Blattidae).<br>( $\mathrm{C}_{ъ} 5$ puc.)

M. Nicolas Ikonnikov some time ago entrusted to me for identification a small but well preserved collection of Blattidae from Central Peru. None of the specimens bear labels giving the names of the places in which they were taken, but instead the longitude and latitude; this is $75^{\circ} 17^{\prime} \mathrm{W}$. of Greenwich, $11^{\circ} 3^{\prime} \mathrm{S}$. lat.

As soon as I began to work out the collection I realised how singularly ignorant we still are of the Blattidae of Peru and the large proportion of new species in this small collection need therefore cause no surprise; I am certain thad numbers of undiscovered species still await the collector in this interesting part of the South American continent.

## Subfam. Ectobiinae.

Anaplecta alaris Sauss. \& Zehntn.
One male.
Anaplecta ikonnikovi, sp. n.
ㅇ. Minute, elliptical. Darls castaneous. Pronotum with the lateral margins broadly liyaline, the disc with a triangular testaceous macula. Tegmina narrowly bordered ontwardly wilt hyalire; mediastinal vein long but not attaining the middle of the marginal area, 9 costals, 4 longitudinal discoidal sectors. Wings hyaline, the veins of the anterior part infuscated, the apical area faintly discoloured; radial vein simple 7 costals, the bases of the more proximal angulated and joined by venules, medio-discal area broad and crossed by 5 transverse venules, the last emit-
ting a very short longitudinal vein towards the base of the apical area, medio-ulnar area extremely narrow, median vein at apex bifurcate, the branches re-uniting to form a minute areole.


Fig. 1. Anaplecta ikonnikovi, sp. n. ulnar vein simple; apical area comparatively small, not occupying two-fifths of the total winglength, divided into two equal halves by a median vein. Supra-anal lamina triangularly produced, apex rounded; subgenital lamina swollen, subvalvate. Legs testaceous.

Total length $6,1 \mathrm{~mm}$.; length of tegmina 5 mm .
A. elliptica Sauss . \& Zehntn. appears to be the nearest ally of this species but differs in many important details.

## Subfam. Pseudomopinae.

Pseudomops obscura S auss.
Ischnoptera neglecta, sp. n.
$\delta^{\pi}$ and 9 . Piceous or dark castaneous, unicolorous. Antennae unicolorous piceous. Ocelli conspicuous testaceous. Distance apart of eyes is less than length of first antennall joint. Pronotum posteriorly subtruncate, disc nith two oblique sulci. Tegmina and wings considerably exceeding the apex of the abdomen. Tegmina with the radial vein simple, about 18 costals, 9 or 10 longitudinal discoidal sec-
 tors. Wings with the marginal area and apex infuscated; mediastinal vein long, extending through two-thirds of the wing-length, ramose, radial vein simple, 78 costals, ulnar vein with 4- -5 incomplete rami, 5 complete rami, an inconspicuous apical triangle.

Supra-anal lamina: ( $\sigma^{7}$ ) strongly produced, subquadrate, truncate, sides rather deflexed, a broad median sulcus with a crescenlic testaceous impression at the base of the lamina, apparenty making the opening of a scent-gland (fig. 2,a); ( ㅇ) subquadrate wirth the posterior margin convexly produced, a median carina. Subgenital lamina (fig. $2, b$ ): ( $\sigma^{\circ}$ ) large, but nor extending as far the apex of the supra-anal lamina, on the left side produced into an asymmetrical lobe bearing at its apex a stout curved spine, a smaller curved spine sutuated to the left of this lobe; ( \& ) semiorbicular, ample. Cerci piceous. Legs piceous or dark castaneous, apices of femora and tibiae, the tibial spine and the
tarsi rufescent. Front femora with 4-5 long spines succeeded distally by fine piliform spines. Total length ( $\begin{gathered}\text { \& \& }) ~ \\ \text { ) } \\ 28 \mathrm{~mm} \text {; ; length of body }\end{gathered}$ 12 mm.; length of tegmina 44 mm ; pronotum $5,3 \mathrm{~mm} \times 6,2 \mathrm{~mm}$.

A long series of specimens. The of type is in the Oxford University Museum (e coll. Wilson S a unders); it was labelled by Francis Walker Ischnoptera melasa Walk. but on comparison with the type of that species in the British Museum I find it is very different.

Ischnoptera ikonnikovi, sp. n.
$\sigma^{\wedge}$ and 아. Head piceous, mouth-parts and ocelli flavid. Antennae fuscous. Distance apart of eyes in $\delta$ scarcely more than breadth of first antennal joint. Pronotum ferruginous with the disc suffused with castaneous. Tegmina and wings considerably exceeding the apex of the abdomen. Tegmina rufo-testaceous; venation as in the preceding species. Wings hyaline, marginal area suffused with flavid, mediastinal vein not quite so long as in the preceding species, radial vein simple, $10-11$ costals, ulnar vein with $7-8$ incomplete and $3-4$ complete rami. Abdomen piceous. Supra-anal lamina: ( $\delta^{7}$ ), quadrate, produced, surpassing the subgenital lamina; ( 8 ) triangular, apex testaceous. Subgenital lamina: ( $\delta^{7}$ ) asymmetrical, of the same shape as in the preceding species. Legs rufo-testaceous; front femora as in the preceding species.

Total length ( $\delta^{\circ} \& \quad$ 우) $24-25 \mathrm{~mm}$; length of body 16 mm .; length of tegmina 21 mm .; pronotum $5 \mathrm{~mm} . \times 6 \mathrm{~mm}$. Two males and two females.

Ischnoptera moxa, sp. 11.
$\delta^{7}$ and $q$. Head piceous, with genae and basal joint of palpi testaceous. Antennae fuscous. Pronotum dark castaneous with lateral margins testaceous; trapezoidal, anteriorly not covering vertex of head, posteriorly produced very obtusely. Tegmina and wings extending considerably beyond the apex of the abdomen in the male sex. barely exceeding it in the female sex. Tegmina dark costaneous, outwardly margined narrowly with testaceous; marginal field broad, radial vein bifurcate, $13 \quad 14$ costals, 8 longitudinal discoidal sectors. Wings with the anterior part suffused with castaneous; mediastinal vein multiramose, radial vein bifurcate, $4-5$ costals, the last two multiramose, ulnar vein with one incomplete and three complete sami, a distinct apical friangle. Abdomen ( $\sigma^{\prime}$ ) testaceous above with a large castaneous blotch before the apex, piceous beneath; 6-th tergite posteriorly concavely emarginate, 7 -th tergite with a triangular notch in the middle of the posterior margin; supra-anal lamina triangular, it apex faintly emarginate. Subgenital lamina ( $\sigma^{\circ}$ ) produced beyond the apex of the supra-anal lamina, asymmetrical, on the right side produced to form an acute inflected lobe with a sharply pointed style, the left style small and inconspicous
(fig. 3). Abdomen ( 8 ) castanevus above anb beneath; supra-anal lamina triangular, emarginate. Legs piceous, a spot on each coxa, the apices of the femora and the tarsi, rufo-testaceous; front femora with a complete row of spines on the anterior margin beneath.

Total length ( $\delta^{7}$ ) $24 \mathrm{mm.;}$ ( ㅇ ) $19 \mathrm{~mm} . ;$ length of body ( $\boldsymbol{\sigma}^{\circ}$ ) 19 mm .; (ㅇ) $15, \cdots$ mm.; length of tegmina (گ) 20 m 11 .; (ㅇ) 16 mm .; pronotum 5 mm . 6 mm .

Ischnoptera parvula Sauss .
One female.
Ischnoptera anisopyg:a, sp. n.
ठ. Castaneous. Head piceous. Pronotum with 2 oblique impressions. Tegmina and wings exceeding the apex of the abdomen. Tegmina with marginal field testaceous in basal half; radial vein simple, about 16 costals, 10 longitudinal discoidal sectors. Wings infuscated ; mediastinal vein multiramose, radial vein simple, $9-10$ costals, ulnar


Fig. 3. Ischnoptera moxa, sp. n. Extremity of body.


Fig. 4. Ischnoptera anisopygia, sp. n. Extremity of body.
vein with 5 short, incomplete rami and 2 complete rami, apical triangle not conspicous.

Supra-anal lamina irregular, produced to form an asymmetrical clavate lobe. Subgenital lamina (fig. 4) asymmetrical and distorted, surpassing the supra-anal lamina, the right style is a curved spine directed inwards the left style is strongly chitinised, broader than long and beset with minute teeth; at the right anterior angle of the lamina is situated a strongly curved hook, which is a process of the deflected posterior angle of the penultimate tergite. Legs testaceous; front femora with 3-4 spines succeeded distally by minute piliform spines.

Total length 14 mm . ; length of body $10, \mathrm{~mm}$ m: length of tegmina 12 mm . ; pronotum 3 mm . X 4 mm .

This little species is closely allied to $l$. inca Sauss. \& Zehnt. from Guatemala and Peru but differs very markedly in the form of the terminal abdominal segment.

Hemithyrsocera peruana, sp. 11 .
б. Uniform rufous. Head a little darker. Antennae rufo-testaceous. Tegmina with radial vein bifurcate, 12 it costals, 9 longitudinal discoidal sectors. Wings flavo-hyaline; mediastinal vein triramose, radial vein bifurcate, 910 costals, medio-discal and medio-ulnar areas equally broad, no transverse vennles, ulnar vein bifurcate, apical triangle well-developed.

Supra-anal lamina subtrapezoidal, posterior margin convex; subgenital lamina asymmetrical, deeply nothed on the left side, with one stout curved spine situated in the notch. Cerci rather short and depressed. Legs strongly armed; front femora with 4 strong spines succeeded distally by minute piliform spines.

Total length 13 mm .; length of body 11 mm .; length of tegmina $11,2 \mathrm{~mm}$.; pronotum 3 mm . $3,2 \mathrm{~mm}$.

Two males.
This is the first record of this characteristically Old World genus from America, but 1 have little doublt that some of the S. American species described under the genus Phyllodromia Serv. will eventualty be proved to belong to this genus.

Neoblattella maculiventris Shelf.
A series of both sexes.
Neoblattella dido Shelf.
One male. Previously recorded from Bolivia.
Pseudophyllodromia peruana Saus .
One female.
Pseudophyllodromia histrio Sauss.
Three males.
Ceratinoptera producta, sp. n.
C. Testaceous. A line on the vertex and two on the frons, castaneous.

Pronotum with castaneous lines and dots arranged in a symmetrical pattern, lateral margins broadly hyaline. Tegmina lanceolate, not extending beyond the 6 -tho abdominal tergite, 7 costals, anterior ulnar triramose, posterior ulnar simple, these sectors more or less longitudinal. Wings rather shorter than the tegmina, 4 costals, ulnar rein simple.

Abdomen sordid testaceous, apex above castaneous: penultimate segment large, almost completely concealing the supra-anal lamina which is minute; subgenital lamina


Fig. 5. Ceratinoptera producta, sp. 11. Subgenital lamina. (fig. 5) narrow, boat-shaped, produced almost as far as the apex of the cerci, with a pair of minute styles at the extreme apex.

Cerci and legs testaceous; front temora armed on the anterior margin beneath with a complete row of spines.

Total length 13 mm . ; length of fegmina 7 mm . ; pronotum $3,2 \mathrm{~mm} . \times 4 \mathrm{~mm}$.

One male.
Paraceratinoptera funebris, sp. n.
ठ. Uniform piceous. Antennae and mouth-parts fuscous. Pronotum smooth, without sulci, posteriorly truncate exposing the scutellum. Tegmina and wings barely exceeding the apex of the abdomen. Tegmina reticulated, radial vein simple, $9-10$ costals, discoidal sectors oblique, posterior ulnar simple. Wings castaneous; 7 irregular costals wrtl reticulations between them, ulnar vein bifurcate and each ramus bifurcate again. Supra-anal lamina triangular, apex nor emarginate; subgenital lamina very slightly asymmetrical with one small style. Cerci rather flattened, fusiform. Front femora entirely unarmed, mid and hind-femora armed with only one spine on the anterior margin, none on the posterior margin. Tarsal arolia absent.

Total length 11 mm. ; length of body $10, \mathrm{~m}$ mim. ; length of tegmina $8, \therefore \mathrm{~mm}$. ; pronotum 3 mm . $\times 4 \mathrm{~mm}$.

One male.
This is an anomalous species on account of the sparse femoral armature and is systematic position is really a little uncertain. It shows affinities with Allacta Sauss. \& Z. but on acccount of the naked tarsal claws 1 prefer to place it temporarily, at any rate, in Paraceratinoptera Sauss.

## Subfam. Nyctiborinae.

## Eunyctibora magnifica, sp. n.

〕. Head, antennae, pronotum, body and legs piceous; tegmina and wings bright ochreous. Antennae very long, slightly incrassated in basal two-thirds. Distance apart of eyes equal to greatest breadth of 1 -st antennal joint. Head with sparse pubescence; frons concave.

Pronotum transvesely elliptical, faintly bisulcate, rugose with a sparse recumbent pubescence. Tegmina and wings considerably exceeding the apex of the abdomen. Tegmina with the costal and sutural margins very narrowly bordered with piceous in their basal halves, radial vein piceous throughout the greater part of its length; marginal field very broad. Ulnar vein of wings 9 ramose, 5 of the rami incomplete. Posterior angles of metanotum with long narrow membranous processes. Supra-anal lamina very small, triangular, carinate. Subgenital lamina produced, asymmetrical with a pair of styles, the right subspatulate, situated slightly to the right of the middle line, the left stout and longer, situated in a notch on the extreme left. Cerci short and blunt, 9 - jointed. Femora unarmed beneath, formula of apical spines ${ }_{1}^{1}, \frac{1}{1}, \frac{1}{2}$ short genicular spines on all the femora. Tibial spines short and sparse.

Posterior metatarsus shorter than the succeeding juints taken together, pulvilli and arolia large.

Total length 36 mm . ; length of body 28 mm . length of tegmina 32 mm .; pronotum $6 \mathrm{~mm} . \times 9 \mathrm{~mm}$.

One example.
Megaloblatta peruviana Doliris.
Two males.

## Subfam. Epilamprinae.

Phaetalia laevigata Beauvois.
One male.
Aüdreja hamiltoni Rehn.
One female, which conforms in all particulars, except the greater number of spines on the anterior femora with the description of the type. Previously recorded from Cuba.

Epilampra conspersa Burm.
One male, two females.

- Var. minor.

Four males and one females, which differ only from the typical form in their smaller sises. Dimensions: Total length (ठ̃) 24 mm ., \& 23 mm . ; length of body ( $\delta^{\circ}$ ) 19 mm ., ( $~$ ) $) 23 \mathrm{~mm}$. length of tegmina ( $\delta^{\circ}$ ) 20 mm ., ( \% ) 19 mm .

> Subfam. Blattinae.

Periplaneta americana L.
Two males in very bad condition.
Subfam. Panchlorinae.
Panchlora peruana Sauss .
One male, one female.
Panchlora moxa Sauss.
One female.

## Subfam. Blaberinae.

Blabera scutata Sauss. \& Zehntn.
Three males and a female. The identification is a little incertain, for the genus Blabera is in a state of great confusion.

Subfam. Corydiinae.
Latindia pusilla Sauss. \& Zelintn.
Two males. There are two other species of Latindia in the collection, but each is represented by an unique broken specimen.

Subfam. Oxyhaloinae.
Chorisoneura gracilis Sauss.
One male.

Chorisoneura thalassina, sp . n .
$\delta^{7}$. Pale sea-green. Eyes black. Antennae pale testaceous. Pronotum transversely elliptical, posteriorly truncate, exposing the scutellum; lateral margins broadly hyaline. Tegmina hyaline, 16 costals, radial vein giving off 4 rami towards the sutural margin, anterior ulnar vein with $6-7$ oblique rami, posterior ulnar simple, all the veins joined by many reticulations. Wings hyaline, costal margin green ; mediastinal vein ramose, 11 costals, their apices incrassated, their bases angulated, medio-discal area four times broader than the medio-ulnar, crossed by 9 transverse venules, ulnar vein 3 to 4 -ramose at apex, apical triangle acutely angled at base, subtruncate at apex. Supra-anal lamina trigonal; subgenital lamina asymmetrical with a pair of large, flattened, strap-like styles, unequal in sise and pressed closely to the sides of the lamina.

Total length 14 mm . ; length of body 11 mm ; length of tegmina $11,5 \mathrm{~mm}$.; pronotum $2,9 \mathrm{~mm}$. $\times 4,5 \mathrm{~mm}$.

One example only.

